

Annual Report of Operations for Year 20/7

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:
WAG 130000
Facility & Owner Information
Facility Name: Salmon River Fish Culture Facility
Operator Name (Permittee): Quinault Indian Nation
Address: 1214 Aalis St. Taholah, WA 98587
Email: tjurasin @ quinault.org Phone: 360-276-8211
Owner Name (If different from operator):
Email: Phone:
Best Management Practices (BMP) Plan
Has the BMP Plan been reviewed this year? Yes \(\square \) No
Does the BMP Plan fulfill the requirements of the General Permit? ✓ Yes ☐ No
Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): 73,353

Pounds of food fed to fish during the maximum month: 11,546, March

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
BY15 Coho	13,028	Salmen River	April
BY16 Coho		Salmon River	2018
BY16 Steelhead		Salmon River	April
BY17 Steelhead	13,741	Salmon River	2018
BY16 Chinook	1,252	Salmon River	July
		150 m	

Fill in the table below with production numbers from the past year. List the maximum amount of fish on-site and the maximum amount of food fed per month.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	61,422	6,740	July	14.143	2,964
February	70,379	9,910	August	18.214	3,564
March	77,091	11,546	September	32,130	4,456
April	83,435	2,997	October	40,815	9.652
May	5,422	1,564	November	48,228	8,673
June	9,500	2,412	December	55,511	9.862

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	100	

Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Date Disposed	Location Disposed
July 24 2017	Upland disposal OIR
1-1 to 12-31-17	Upland disposal OIR
iault Indian Roseri	vation
	July 24 2017

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
		× ×	
	(i)		
	8		
itional Comm	ents: No mass mo	rtalities to report (>3	1 / Week

Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.						
There	were	no	periods	of	noncompliance durin	ng 2017.
\$						
		. 4				-
				17		

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
7-24-17		OLSP clean-out and inspection for leaks/condition
1-1 to 12-31-17		Continuous and intermittenik pectulan of production units and wiste conveyances (weekly on average)
		- STRYANCES (WEEKIN OH WILLIAMS)
	*	N.

Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical during the past calendar year. Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
□ Yes ▼ No	Azithromycin
□ Yes ズ No	Chloramine-T: See additional reporting requirements on page 7
□ Yes No	Chlorine
□ Yes 汉 No	Draxxin
□ Yes > No	Erythromycin - injectable
☐ Yes ☑ No	Erythromycin - medicated feed
⊠ Yes □ No	Florfenicol (Aquaflor)
¥ Yes □ No	Formalin - 37% formaldehyde: See additional reporting requirements on page 7
□ Yes > No	Herbicide - describe:
□ Yes Æ No	Hormone - describe:
□ Yes ☑ No	Hydrogen Peroxide: See additional reporting requirements on page 7
⊠ Yes □ No	lodine: See additional reporting requirements on page 7
□ Yes ⊠ No	Oxytetracycline
□ Yes ™ No	Potassium Permanganate: See additional reporting requirements on page 7
≱ Yes □ No	Romet
□ Yes ⊠ No	SLICE (emamectin benzoate)
□ Yes ⊠ No	Sodium Chloride - salt
□ Yes ⊠ No	Vibrio vaccine
□ Yes □ No	Other:
□ Yes □ No	Other:

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: Romet	TC	Generic Name: Rome	+
Reason for use: A erom	ionas salmonicio		15 Coho 3 Chineck
☐ Preventative/Prophylactic ☑ As-needed	Total quantity of formulated product per treatment (specify units): See report	Total quantity of formulated p (specify units): 1,433 Feed -	roduct used in past year
Date(s) of treatment: 6-8	,7-22,5-30		Total number of treatments in
Sw	attached medicated	feed report	past year: 3
Maximum dally volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treat 5 days, as	
Method of application:	☐ Static Bath. ☐ Flow-through	Ø Medicated Feed ☐ Other (describe):	
Location in facility chemical was used (check all that apply):	☐ Raceways ☐ Incubation building	Ponds Off-line settling basin	Other (describe):
Where did water treated with this chemical go? (check all that apply):	☐ Discharged w/o treatment☐ Settling basin	Septic System Publicly owned treatment works	Other (describe):
Provide any additional information	on about how this chemical was u	sed and/or special pollution pre	vention practices during use:
4			
Descriptions of the Column of			THE RESERVE TO THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.
Brand Name: Agua flo		Generic Name: Florf	enicol
17900+10	bacterium psychre	ophilum.	
17900+10	Total quantity of formulated product per treatment:	ophilum Total quantity of formulated pr	roduct used in past year bs of feed -
Reason for use: Flavo	bacterium psychro	ophilum Total quantity of formulated pr	roduct used in past year bs of feed - lace use
Reason for use: Flavo. Preventative/Prophylactic As-needed Date(s) of treatment: 3-7	Total quantity of formulated product per treatment: See report	Total quantity of formulated pr (specify units): 660 16	roduct used in past year bs of feed -
Reason for use: Flavo. Preventative/Prophylactic As-needed Date(s) of treatment: 3-7	Total quantity of formulated product per treatment: See report 34-9	Total quantity of formulated pr (specify units): 660 16	roduct used in past year bs of feed - lace US2 Total number of treatments in past year:
Reason for use: Flavo. Preventative/Prophylactic As-needed Date(s) of treatment: 3-7 See of Maximum daily volume of treated water:	Dacterium psychro Total quantity of formulated product per treatment: See report B 4-9 attached medicat Treatment concentration (specify units):	Total quantity of formulated presents units): 660 16	roduct used in past year bs of feed - lace US2 Total number of treatments in past year:
Reason for use: Flavo. Preventative/Prophylactic As-needed Date(s) of treatment: 3-7 See of Maximum dally volume of treated water:	Total quantity of formulated product per treatment: See report B 4-9 attached medicate Treatment concentration (specify units): NA	Total quantity of formulated programmes (specify units): 660 literation and frequency of treat 10 days, as Medicated Feed	roduct used in past year bs of feed - lace US2 Total number of treatments in past year:
Reason for use: Flavo. Preventative/Prophylactic As-needed Date(s) of treatment: 3-7 See of Maximum dally volume of treated water: Method of application: Location in facility chemical was used	Total quantity of formulated product per treatment: See report B 4-9 attached medicate Treatment concentration (specify units): Static Bath Flow-through	Total quantity of formulated programmer (specify units): 660 its feed report Duration and frequency of treat / O day S , as Medicated Feed Other (describe): Ponds Off-line settling basin	roduct used in past year bs of feect - lace USE Total number of treatments in past year: ment(s):

Aquaculture Drugs and Chemicals (cont'd) Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments				
Tank Volume	650 (Liters)			
Desired Static Bath Treatment Concentration	75 PD			
Volume of Product Needed	5 (Iters Product			
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 7/5 ppb Active Ingredient: 7/ ppb Iodine Specify Units			
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	6.14 cfs Specify Units			
Maximum % of Facility Discharge Treated	10 % of Total Discharge			
Flow-	Through Treatments			
Tank Volume	424,000 (Iters)			
Calculated Flow Rate	2,543 Liters/Minute			
Duration of Treatment	90 Minutes			
Desired Flow-Through Treatment Concentration of Product	116 1191			
Amount of Product to Add Initially	NA- do not charge units Liters Product			
Amount of Product to Add During Treatment	294 mL/Minute			
Total Volume of Product Needed	26.5 (Liters Product)			
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 15,902 ppb Active Ingredient: 5,884 ppb Formaldehyde Specify Units			
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	6.14 cfs Specify Units			
Maximum % of Facility Discharge Treated	10 % of Total Discharge			

Changes to the Facility or Operations

Describe any changes to the facility or	operations since the last ar	inual report.	
No changes	to report		
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Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Tyler Jurasin	Fisheries Operations M	assage
Printed name of person signing	Title	· Myor
Juston Gusain	1/20/18	
Applicant Signature	Date Signed	

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191

Washington Hatchery Annual Report

1200 Sixth Avenue, Suite 900

Seattle, WA 98101-3140

CHEMICAL LOG SHEET (SEE ALSO THE REQUIREMENTS IN THE ANNUAL REPORT)

NPDES Permit#_WAG130000_ Facility Name: Salmon River Fish Culture Facility Flow Through Chemical Treatments 866 Total Flow Siller . Vessella Che Active Tes Rinne. of Co Person Date Trente % Al Applied of Cour. Solution (ppb) logredient Treat Names reporting Types mt m Te (ppm) (ch) (ppb) (ch) 4/20/2017 Fermalia 14,707 5,442 Dan Fickling Dan Helding RW3.3 A.L. Broke 177 7.570 AG D 44 64.907 1.442 /21/2017 (Yan Fielding **Evernalia** Furmaldehyde 377 7,570 60 Hush 169 0.4412.4 4/21/2017 RW 3.5 Fernalis l vermaldehyde ŧΠ 169 4,432 Dan Fielding 11.979 Dan Facilities 5/3/2017 RW1 Livernalis 173-7.570 LIM 044 6 14 12,096 4 476 5/3/2017 RW2 4,476 Flush Harmahi 169 0.44 6.14 12,096 Dan Fickling \$73/2017 HW't 37% 7,570 ml. 40 Hunk 169 0.44 4,476 12,096 l kan f Selching 5/3/2017 (Formula 37% 7,570 ml. 60 Hunk 169 0.446.14 120% 4.476 Dan Hickhni 9/3/2017 PWS | Sush | Sush Esemalo l ivrealdehyde 4,476 6.14 12,096 5/4/2017 RWI firmalia 17% 2 \$20 ml 160 0.44 A 3 11.789 4 367 Dan Harlet 94/2017 RW2 7,570 ml Fermalia 164 0.44 6.3 11,789 4_362 Don Highlang 544/2017 RW3 173 7,570 ed i Hush 169 0.44 4_362 Dan Fielding Fernaha 7,570 ml. 60 Huth 169 0.44 11,729 4,362 Dan Hicklin 5/4/2017 RWS abbrheele 17% 7.370 ml 0.44 4,162 7.570 ml Dan 15chling l'ermalın 172 Hush 0.44 14.3 10,388 1,841 \$/2 \\20012 PW3.4 37% l Torch I Torch 10,388 3,843 Dan Pickbug Dan Fickling 5/24/2017 Small Pond l'ermalin Evernaldehyde 177 14,350 mt 172 143 3,643 9/29/2017 inania. 14,350 ml 172 Proton K) #2 12.9 4,038 Om Picking 5/26/2017 Small Prod remahe 17% 14 191 Hush 172 C) II.2 4,038 Dan Fichbog \$31/2017 Small Pond 26,500 ml. 9D 40 Hush 116 13 10.9 15,902 1,044 Den Fickbug 10/12/2017 RW3.4 17:2 12.44 4,418 0/12/2017 Dan (Schbng 17% 15 (Yush 1,582 0.0134 14.4 1.472 549 10/13/2017 RW3.4 irmila Evermaldehyde 7,570 ml. 4,418 169 12,44 11.941 Don Hicking 10/14/2017 irmalio 17% 15 Flush 1,542 កពាង 14.4 1.472 Dan Liekbup 10/15/2017 immalia ord . 15 Hush 1,582 0.0134 14.4 1,472 545 Dan Fickboo naldebyde 10/17/2017 17% 540 Hunh Dan Fickling 540 f-Rusch (-Rusch Formaldehyde 37% 13 1.582 00134 14.4 2 941 LOSS 10/20/2012 PW14 177 7,570 ml Formaldelyde 47/51 169 10,955 Day Ficking Das Fielding 10/21/2017 RW3A l termala 17% 7,570 60 Husb 169 0.44 13.56 10,955 4/053 10/21/2012 (Tunh 1,542 15 0.0134 14.4 2,943 1,069 Dan Elektra 10/22/2017 RW12 iemalie rmoldchyde 177-7,570 rd. 10,316 3,0117 Dan Helding 10/22/2011 Dan Fickling \rmalia Fremuldehyde 17% 540 13 Hush 1.582 noru 14.4 2.941 LIMP 10/24/2017 111.7 37% vemalis 1,512 15 Hush 0.0134 LIMA Dan Picking Dan Fichbig 10/25/2017 Ivressie Formaldelyale 177 7,570 Flush 0.44 14.4 10.316 1117 10/26/2017 RW1.2 Eiremaklehyde 7,370 ml Flush 169 0.44 14.4 10,316 3.817 Dan Fickling 10/26/2017 11123 regulia 17% Hush 1,512 0.0134 Dan 1 Selding 10/27/2017 Den Fickling **trmalia** 45,400 ml 120 i lunh i lunh 345 14.4 15,467 5.723 111.2.3 10/28/2017 taldebale 17% 540 1,542 4,415 LAU lien Fielding T123 Dun Fickling 177 540 15 Flands 1.502 ពភា ង 12.4 4.415 1.614 irmalia 10/11/2017 T1.2.3 17% 1,542 15 0.0134 f'hesh f'hush 4,413 HAJ Den Picking 11/1/2013 RW3,4 l cression Firmshichsic 173 7,170 169 0.44 13.56 10,955 4,053 Dan Fickling 11/1/2017 THE Exermeldehyde 56,700 ml. 120 Hush H I 3.43 201.8 13,373 4,941 Oan Helding RW1.2 13/1/2017 17% 7,370 i-bash 169 7,142 2,642 11/2/2017 RW3,4 Dan Fielding 7,570 ml Fermaldehyde 37% 60 Hush 169 044 13.50 10.944 1043 11/2/2017 Small Pre 17% Fermaldehyde 120 Hush 3.43 20.8 13,373 4,948 Dan Hickbag T1.2.3.6 i urmalin Evernakichyde 37% 1.503 0.0134 20.82 1,5416 11/7/2017 RWLI male l'ermaldehyde Hush 169 0.44 13.56 101935 4.053 Dan Fickling T1.2.3.6 11/4/2017 17% 540 ml 13 Flush 1,582 0.0134 20.43 4,072 1,506 Dan Hickling 11/5/2017 T1.2.3,6 Dan Freiding 540 ml. 13 Hunh 1,582 0.0134 2D 83 4.072 1,506 11/6/2017 Small Pro 17% 41,600 ml. Hush Hush III 2.45 20.8 13,0%3 Dan Pickling RW3,4 2,967 Immalia 37% 8.500 ml. 60 167 20.8 1.019 Dan Fielding 11/7/2017 T1.2 3 6 15 Don Helding Hush 1,542 0.0134 20.12 4.072 1,506 11/9/2017 T1236 37% - Cir 13 flush 1.582 4,072 1,506 Dan Helding 11/11/2013 Dan Helding والمستبر ا Formaldehyde 540 ml. 13 Hush 1.382 0.0134 20.12 4.072 1.40ń 11/12/2017 T1236 177 540 mJ 1,512 0.0134 20:82 4,072 1,506 Dan Hehben T1236 Shah l'estra lie 37% Stri mi 15 T 5/12 20.82 4,1172 1,506 Dan Hicking vernaldebyde 11/16/2017 Tt.2 16 vemalie 540 ml. Dan Freiding 13 Hush 1,542 0.0134 20.62 4.072 1,506 11/11/2012 T1,2,3.6 l'ermaln i wmaldchyde 17% 540 ml 15 Hush 1,382 4,022 1,506 (Fan Hickhag 11/19/2017 71.2.3.6 Dan Hickhop irmat l'ormaldehyde 177 15 Phush 1.542 0.0134 1,506 11/21/2017 NJ5 l'vernalle 17% Un 1,542 0.0134 3,054 1,130 20.82 Dan Helding 11/23/2017 T3.5,6 ivm 540 ml 15 Flush 1.582 Ontu 1 064 1,130 Dan Helding twmalin 11/25/2017 73.5.6 17% 540 ml. 15 1_582 0.0134 i lunh 20.83 3,054 1.130 Dan Highling 13.5.6 l comalio l remaldebale 37% 540 i hush 1,582 0.0134 20,82 3.054 1.130 11/20/2017 T5.6 temalir Dan Fielding l'immabiletyste 177 Hush 1.542 ០០ខេ 20 82 2036 243 11/30/2017 T3.6 Exemple 17% 540 ml. 15 1.542 99134 20.12 733 2.034 Dan Helding 12/2/2017 13.6 940 ml. Fremalic 13 13ush 1,582 1011 10.13 2,335 864 Dan Fickling 12/3/2017 TSA iornaldebyde Dan Hekling 15 Plush 1.582 0.0134 18.15 2.335 864 T3.6 Permalin Numaklebule 17% 540 ml. (finsb 1.582 12/7/2017 T3.6 115 Day Highling l'immaldehyde Hush 1,582 0.0134 111.15 2.334 864 T5.6 Fernalis 17% 540 ml. Hush 1,542 0.0134 18.15 2,335 Dan Hickling 12/10/2017 iernale Firmaldehyde 540 ml. 15 Bush 1,582 0.0134 14.15 2,335 164 al-leby-le 12/12/2017 T5.6 17% 940 ші. 13 Hab 1,382 0,0134 18.15 Due Fieldung 12/14/2017 Piernalie 173 340 ml. 14 Buch 1.512 0.0134 1,168 Dan Eschling 12/16/2017 l'ormalu 5-01) ini. Dan Fickling Formaldebyde طسة 1,382 0.0134 18.15 1,168 432 2/17/2017 (introduc 17% 540 ml. 540 ml. 15 ,5112 0.0134 1,168 18.15 432 Dan Fighling 12/19/2017 13 intendi 13 1. SIL2 0.0134 131.15 LIM 412 12/21/2017 Fremali 37% 540 ml. 1,582 18.15 1.168 412 Dan (Arkhop 12/21/2012 1,512 1,512 1.164 والمصورة termaktetsyste 17% 540 ml. 0014 18.15 432 Dan Fickling 12/24/2017 17% 540 ml. 18.15 1,168 432 Dan Fightion 12/26/2017 Permate Formaldehyde 37% 540 ml. Ruch 1,582 0.0134 1,164 18.15 Dat Pickling 12/28/2017 13 vermaldebyde Dan Fiehling 13 Hash 1,582 0.0134 18.15 1.168 432 12/30/2017 Firmalio Frenklehyde 37% 540 md 1,582 0.013.34

432

[18.15]

1,168

Dan Fielding

Static Bath Chemical Treatments															
Date	Vessel(s) Trented	Vessels Trested Simultan	Chemical Names	Active legrediest	% AI	Amount Applied/ Yestel	Units	Vessel Valumo(cf	Trustment Types	Treatment Conc. Al(ppm)	Flow Trusted (ch)	Total Effluent Flow (cfs)	Effuent Cont. Solution (ppb)	Effluent Cone, Al (ppb)	Person reporting
HV17/2017	ΤI	I	Ovadine	lutar	107	5,000	ml.	2.5	Static	77	0.0134		715	7)	Dan Helding
10/24/2017	112	l	Uvadine	kyline	10%	5,000	ral.	23	Static	77	0.0134	34.4	715	71	Dan Fielding
10/31/2017	J.R.	1	Ovnáne	ladine	10%	2,000	ml.	92	Static	77	0.0134	14.4	715	71	Das Helding
11/7/2017	16	I	Ovadane	lodine	10%	1,000	ml.	4.5	Static	77	0.0134	20.62	494	49	Dan Fielding
11/16/2017	76	1	Orabie	lealing	10%	1,000	ml.	4.6	Static	77	0.0134	20 82	194	49	Das Helding
11/21/2017	T6	1	Ovadate	kuline	10%	5(X)	anl.	2.3	State	77	0.0134	20.42	494	49	Dan Fielding
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															1
						6							i		

(Birth a cupy of the label with application requirements and the Material Safety Data Sheet (MSUS) must be kept in your recreats 1 Frestorest type means, for example, static or flush bath, injection or food

Medicated Feed/Antibiotic Usage Report 2017								
Salmon River Fish Culture Facility	NPDES Permit # WAG130000							

					Romet TC				
	Start Date End 6/8/2017 7/22/2017 5/30/2017	Date 6/12/2017 7/26/2017 6/30/2017	5	Location Large Pond Large Pond Small Pond		Pathogen Aeromonas salmonicida Aeromonas salmonicida Aeromonas salmonicida	Dosage 50 mg/kg 50 mg/kg 50 mg/kg	Total Medicated Feed (lbs) 550 845 38	Brood Year and Species 8Y16 Coho 8Y16 Coho 8Y15 Chinook
Total								1,433	
					Aquaflor				
	3 17 1204 7	- 100 1-00			Florfenicol/				
	3/7/2017	3/16/2017	10	RW 1,2,3	Aquatior Florienicol/	Flavobacterium Psychrophilum	15 mg/Kg	220	BY16 Coho
	4/9/2017	4/18/2017	10	RW 1,2,3	Aquaflor	Flavobacterium Psychrophilum	15 mg/Kg	440	BY16 Coho